

REMARKS

The present amendment is in response to the Office Action mailed September 20, 2005, in which Claims 1-18 were rejected. Applicant has thoroughly reviewed the outstanding Office Action including the Examiner's remarks and the references cited therein. The following remarks are believed to be fully responsive to the Office Action and, when coupled with the above amendments, are believed to render the claims at issue patentable.

A new Declaration is attached reflecting the correct spelling of the word "CENTRIFUGAL" in the title as required by the Examiner in the Office Action.

Claims 1, 9 and 14 are amended and Claims 8, 13 and 18 are canceled. In addition, claim 19 is newly added. The title of the present application is corrected. Applicant respectfully submits that no new matter has been added and that the originally filed specification, drawings, and claims support the amendments.

Claim Rejections - 35 U.S.C. § 103

According to the Office Action, Claims 1, 3, 4, 7 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey et al. (US 6,042,474) in view of Perazzo (US 6,813,152 B2). Claim 2 was rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey et al. in view of Varghese (US 2001/0037985). Claim 5 was rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey et al. as modified by Perazzo, and further in view of Bonet (US 6,414,845 B2). Claims 6, 9, 11 and 13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey et al. as modified by Perazzo, and further in view of Seesemann (US 6,384,733 B1). Claim 10 was rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey et al. in view of Perazzo, and Seesemann as applied to claim 9, and further in view of Varghese. Claim 11 was rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey et

al. in view of Perazzo and Seesemann as applied to claim 11, and further in view of Bonet. Claims 14-16 and 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey et al. in view of Smith et al. (US 6,801,428 B2), Perazzo and Seesemann. Claim 17 was rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey et al. in view of Perazzo, Seesemann and Smith et al., as applied to claim 16, and further in view of Bonet.

Applicant respectfully traverses these rejections. In amended claim 1 of the present application, the heat dissipation module with twin centrifugal fans includes a honeycomb panel, a first fan, an air duct, a second fan, and an upper cover and a bottom cover. Especially, sliding rails are formed by the edges of the upper cover and the bottom cover on both sides of the first fan and the second fan of the heat dissipation module. Therefore, the upper cover and the bottom cover are utilized to not only couple with the first fan and the second fan, but also provide the heat dissipation module with an ability to slide and couple to the electrical equipment while the heat dissipation module is being inserted into the electrical equipment.

Referring to US Patent 6,042,474, Harvey discloses a ventilation unit for an operative arrangement within an electronic apparatus. This unit has an exterior side having a first exhaust port separated from, and located in stacked relationship with, a second exhaust port; and a first and second powered air mover, each having an intake side oriented at an angle greater than zero degrees from the exterior side. Harvey is silent on edges of the upper cover and the bottom cover to form sliding rails on both sides of the first fan and the second fan of the heat dissipation module.

In the Office Action, the Examiner asserts and sketches the sliding rails on FIGS. 1 and 5 of Harvey. However, Harvey never teaches and suggests forming the sliding rail by the edges of the upper cover and the bottom cover. Referring to FIG. 8 of Harvey, the ventilation unit 10 is

fixed to the electronic apparatus chassis 70 and cannot slide thereon. Referring to FIGS. 5 and 6, no such edges on the both sides of the powered air mover assembly 22 can be provided with the sliding rails for the ventilation unit 10 to slide and couple to the electrical equipment while the heat dissipation module is being inserted into the electrical equipment.

Perazzo, Seesemann, Smith and Bonet all fail to teach or suggest utilizing the edges of the upper cover and the bottom cover to form the sliding rail for the heat dissipation module.

Referring to the specification of the present application, the sliding rails 120, 130, 150 and 160 are designed on an upper cover 110 and a bottom cover 140 respectively. When the upper cover 110, the bottom cover 140, the first fan 210 and the second fan 220 are assembled together, the sliding rails 120, 130, 150 and 160 are simultaneously disposed on the two sides of the first fan 210 and the second fan 220. Because the sliding rails 120, 130, 150 and 160 are directly formed by edges of the upper cover 110 and the bottom cover 140, the sliding rails 120, 130, 150 and 160 can guide the heat dissipation module 100 to install in the electrical equipment and spend no additional time for assembling the rails 120, 130, 150 and 160 in the heat dissipation module 100 (page 7, lines 16-24).

Amended claim 1 is not obvious even in view of the cited references. For the same reason, amended claims 9 and 14, and newly added claim 19 are also not obvious. Applicant respectfully submits that independent claims 1, 9, 14 and 19 are allowable over the cited references. In addition, claims 2-7, 10-12 and 15-17 depend on claims 1, 9 and 14 respectively, and add further limitations thereto, are also allowable over the cited references.

Accordingly, in view of the invention as a whole, applicant respectfully submits that Claims 1-7, 9-12 and 14-17 are not obvious in view of the cited references and respectfully

requests withdrawal of the rejections under 35 U.S.C. § 103(a) thereof. Now that the rejections in the Office Action have been overcome, withdrawal of the rejections and expedited passage of the application to issue are respectfully requested.

CONCLUSION

In light of the above amendments and remarks, Applicant respectfully submits that all pending claims as currently presented are in condition for allowance and hereby respectfully request reconsideration. Applicant respectfully requests the Examiner to pass the case to issue at the earliest convenience.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

LOWE HAUPTMAN & BERNER, LLP

Benjamin J. Hauptman
Registration No. 29,310

Customer Number: 22429
1700 Diagonal Road, Suite 300
Alexandria, Virginia 22314
(703) 684-1111
(703) 518-5499 Facsimile
Date: **December 20, 2005**
BJH/jk